Baltimore Harbor Total Maximum Daily Load Stakeholder Advisory Group

List of Acronyms and Definitions

TMDL – A Total Maximum Daily Load is an estimate of the maximum amount of a pollutant that may be introduced into a waterbody while still ensuring attainment and maintenance of water quality standards. A TMDL needs to account for seasonal variation and must include a margin of safety (MOS). Section 303(d) of the Clean Water Act (CWA) and the implementing regulations (40 C.F.R. § 130.7) require all states to develop TMDLs for waters where required point and nonpoint source pollution controls are not stringent enough to attain or maintain compliance with state water quality standards after the application of technology based and other required controls.

CWA – Clean Water Act (Federal Water Pollution Control Act)

WQS – Water Quality Standard, which is the combination of a designated use for a particular body of water and the water quality criteria designed to protect that use. Designated uses include activities such as swimming, fishing, and drinking water supply. Water quality criteria strive to reflect the latest scientific knowledge about the effects of pollutants on human health and aquatic life. Criteria can take the form of either specific numerical limits or more general narrative statements.

TSS – Total Suspended Solids, the amount of material (organic and mineral) that is found in the water column

303(d) – Refers to section 303(d) of the Clean Water Act

Watershed – refers to the land area that drains into a specific pond, lake, or river

PS – Point Source, Refers to pollution that arrives into a waterbody through a specific pipe or point

NPS– Nonpoint Source, Refers to pollution that arrives into a waterbody through diffuse sources such as agricultural lands and urban surfaces

PCBs – Polychlorinated Biphenyls – a class of organic contaminants of concern

PAHs – Polyaromatic Hydrocarbons – a general class of organic contaminants of concern

Metals – In the Baltimore Harbor environment the metals commonly referred to are: chrome (Cr), lead (Pb), zinc (Zn), and sometimes copper (Cu)

Nutrients – General description for Nitrogen and Phosphorus and its various compounds found in the water

Sediment Flux – Describes the process in which materials move between the surface sediments and the water column including pore water

Pore water – Describes the water found between the pores of the surface sediments – it has direct contact with the sediment unlike water found in the above water column

DO – Dissolved Oxygen, level of oxygen dissolved in the water column – usually varies with depth

SWMM – Storm Water Management Model, the model used by MDE to estimate the toxics loadings from the watershed to Baltimore Harbor

HSPF – Hydrologic Simulation Program Fortran, the model used by MDE to estimate the nutrients loadings from the watershed to Baltimore Harbor

POM – Princeton Ocean Model, the model used by the University of Maryland Center for Environmental Studies to estimate the hydrodynamics and sediment transport characteristics of Baltimore Harbor

Box Model – Baltimore Harbor Toxics Box Model, the model used by the University of Maryland Center for Environmental Studies to estimate the impact of toxics loadings on bioaccumulation within fish and humans

CH3D – Curvilinear Hydrodynamic 3 Dimension, the model used by the Virginia Institute of Marine Science to estimate the hydrodynamics and sediment transport characteristics of the upper Chesapeake Bay (including Baltimore Harbor)

TOXIWASP – EPA model used by the Virginia Institute of Marine Science to estimate the impact of toxics loadings on bioaccumulation within fish and humans

CE-QUAL-ICM – Army Corps of Engineers model used by the Virginia Institute of Marine Science to estimate the impact of nutrients loadings on water quality

EOS – Edge of Stream, describes how a watershed boundary is defined in a watershed model, the EOS is where the watershed and tributary ends and the river of concern begins

EMC – Event Mean Concentration, describes the concentration of a contaminant for a given precipitation event

NPDES – National Pollution Discharge Elimination System, is the permits system established under the CWA to control and eliminate point source discharges to waters of the country. A NPDES permit is required for point source dischargers, including certain stormwater systems

EPA - Environmental Protection Agency

CBP – Chesapeake Bay Program

MDE – Maryland Department of the Environment

CSO - Combined Sewer Overflow – a CSO occurs when a combined sewer system (sanitary and stormwater plumbed together) is above its rated handling and treatment capacity. As a result the combine wastewater is released without treatment

WWTP - Wastewater Treatment Plant – a plant that treats sanitary sewer (and sometimes stormwater) waste

POTW - Publicly Owned Treatment Works – a plant that treats sanitary sewer (and sometimes stormwater) waste

BMP - Best Management Practice – describes a variety of structural and nonstructural measures that can be used to reduce nonpoint source pollution

LA - Load Allocation – the portion of the TMDL allocation determined for nonpoint sources

WLA - Wasteload Allocation – the portion of the TMDL allocation determined for point souces

MOS - Margin of Safety – the portion of the TMDL allocation determined for uncertainty and safety

QA/QC - Quality Assurance/Quality Control – procedures that are used to verify data collection and analysis validity